# Hydrologic Outlook

Brian McInerney
Hydrologist
National Weather Service
March 2003

# **Great Basin Precipitation**



# Sevier River Basin Precipitation



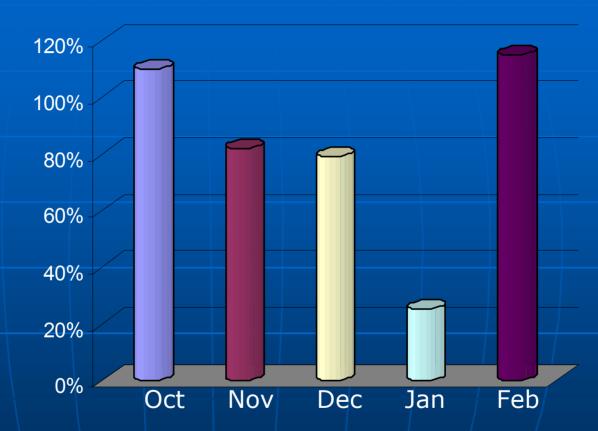
# Green River Basin Precipitation



# Virgin River Basin Precipitation

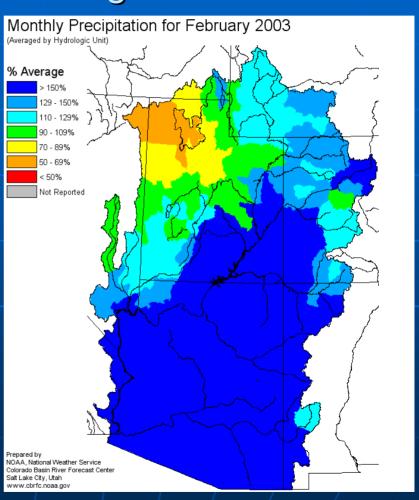


- Nov. 82%
- Dec. 79%
- Jan. 25%
- Feb. 115%



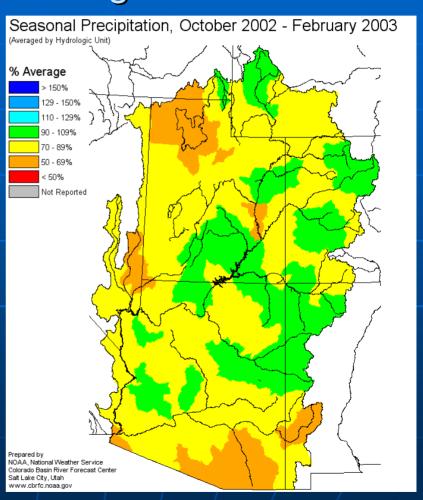
#### Graphical Precipitation Map February 2003 Utah and Surrounding Area

- Southeast Utah received greater than 150% of normal
- Wasatch Front received 70-89% of normal
- A nice rebound from the dry January climate for part of the state



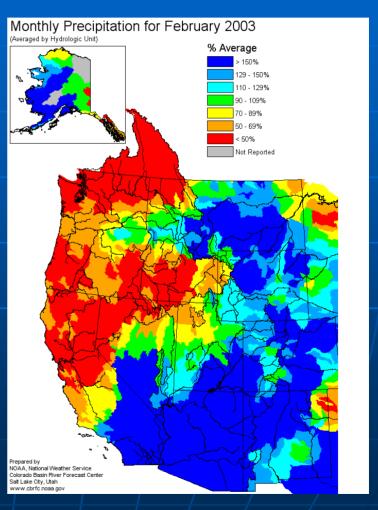
#### Graphical Precipitation Map October through February Utah and Surrounding Area

- Normal amounts in south central Utah
- Most of the state ranging in the 70-89% of normal range
- February was a great help, but we need above normal amounts during this time



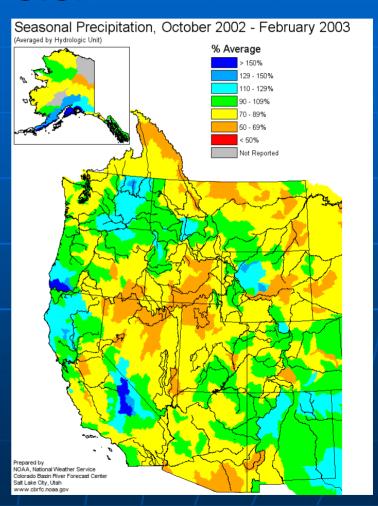
#### Graphical Precipitation Map February 2003 Western U.S.

- Southeast Utah, Southern Nevada, Arizona, Western Colorado, and parts of Wyoming and Montana received the most precip in the area
- Jet Stream and storm track split for most of the month bringing storms to the south and then sweeping around to the east

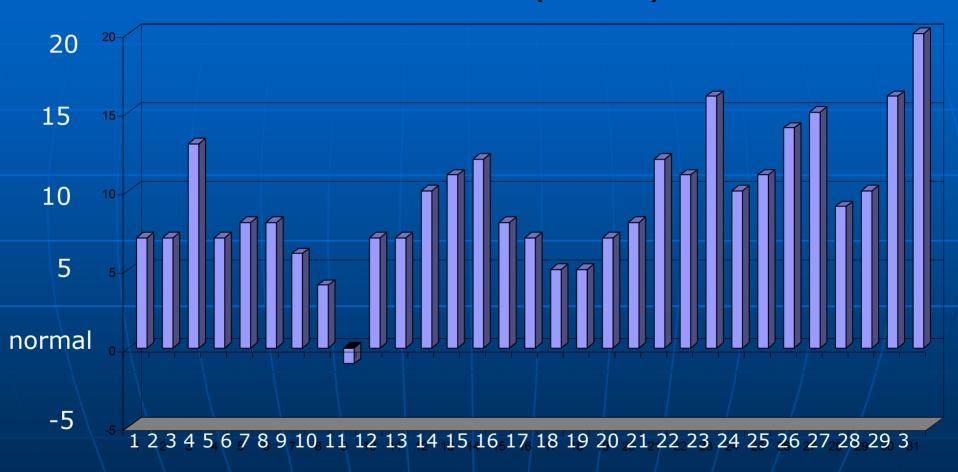


#### Graphical Precipitation Map October through February Western U.S.

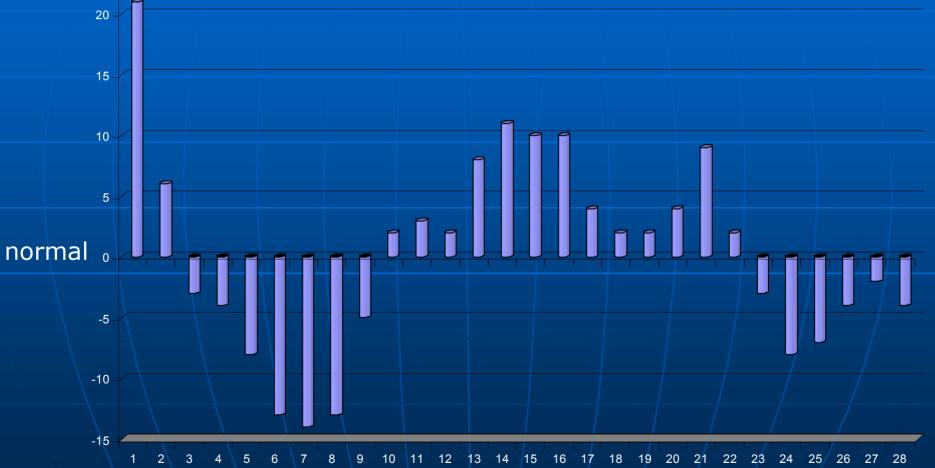
- Seasonal precipitation amounts were greater in areas surrounding Utah
- Most of the west recorded below average amounts



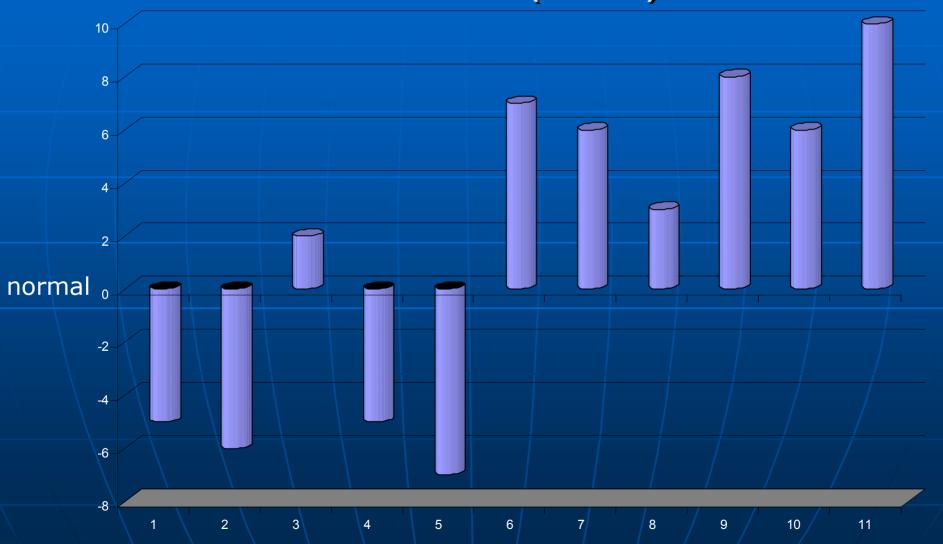
# January Temperature Departure From Normal (SLC)



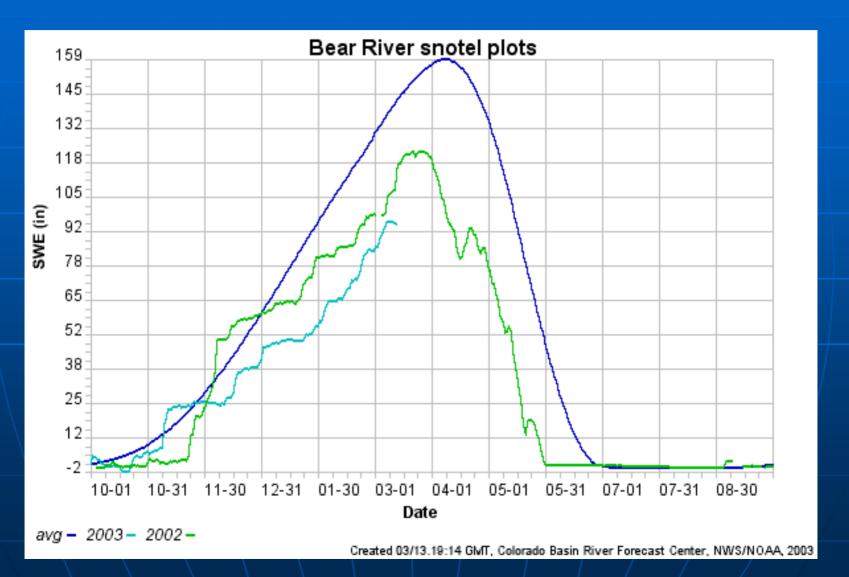
# February Temperature Departure From Normal (SLC)



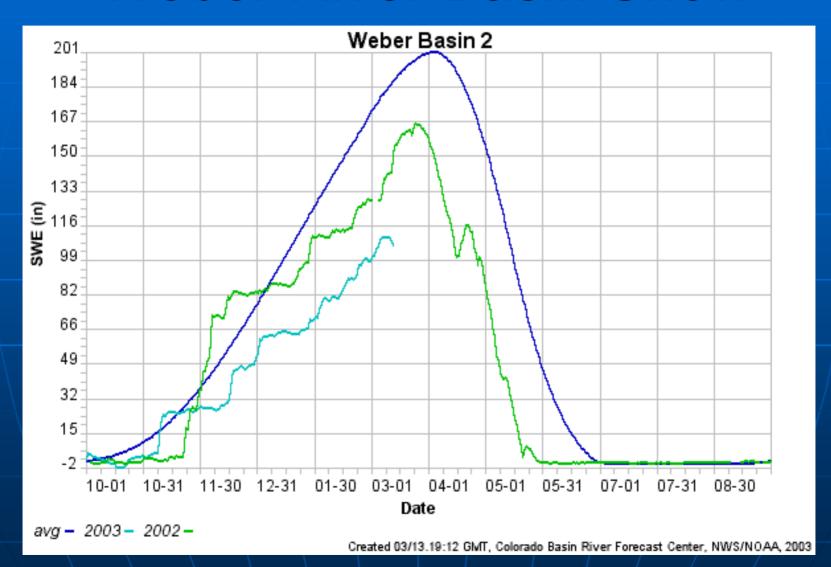
# March Temperature Departure From Normal (SLC)



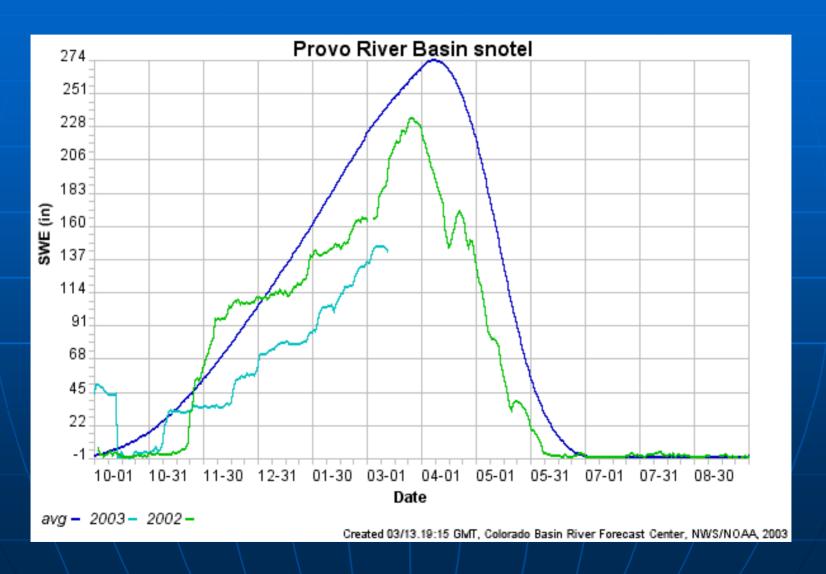
#### Bear River Basin Snow



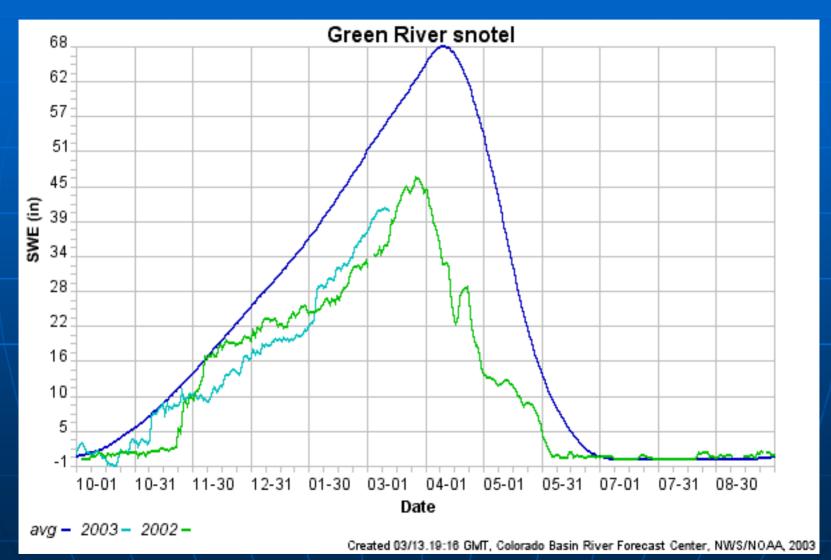
### Weber River Basin Snow



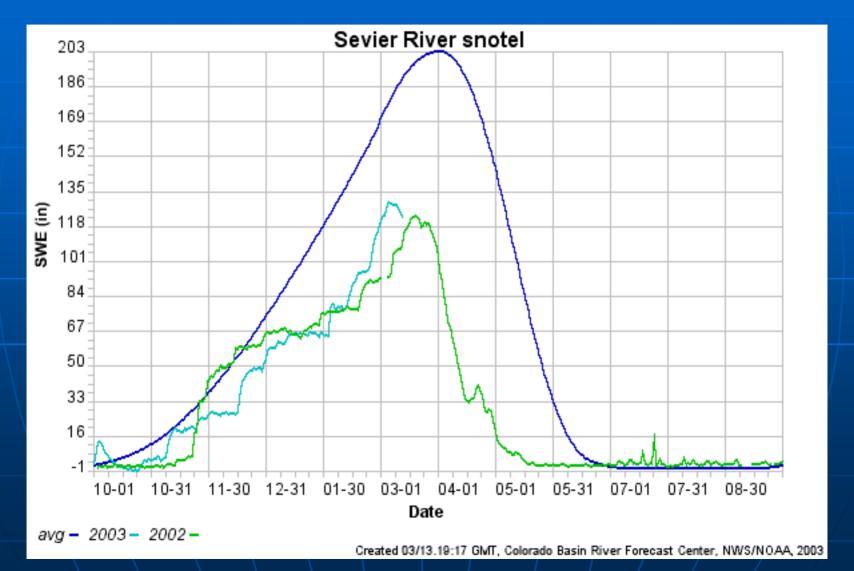
# Provo River Basin Snow



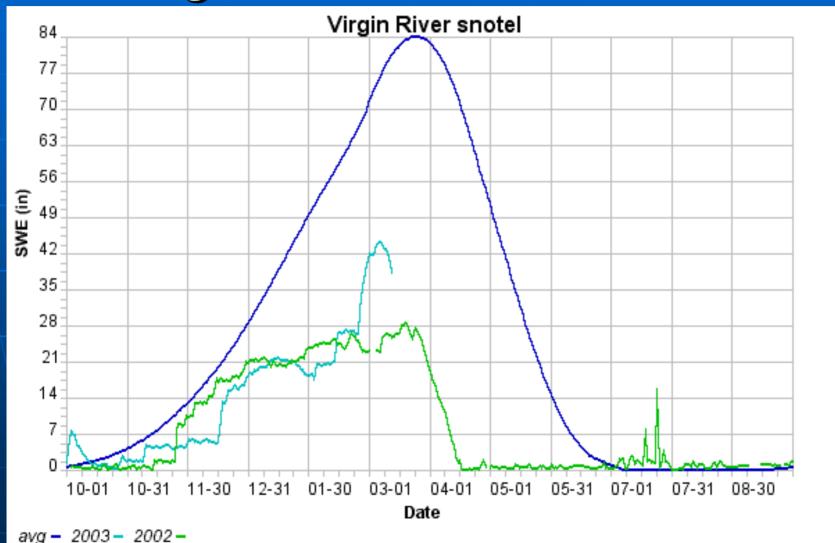
# Green River Basin Snow

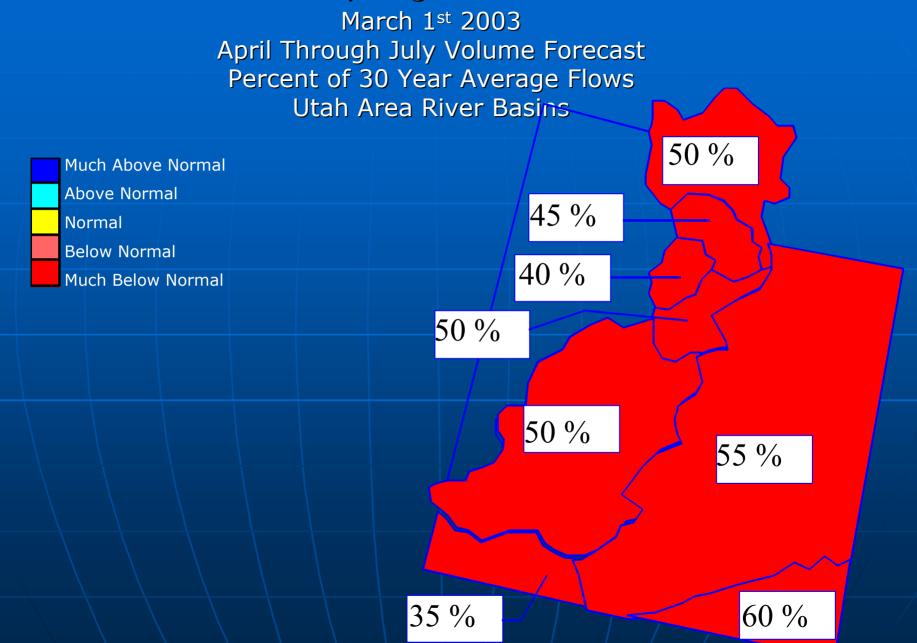


### Sevier River Basin Snow

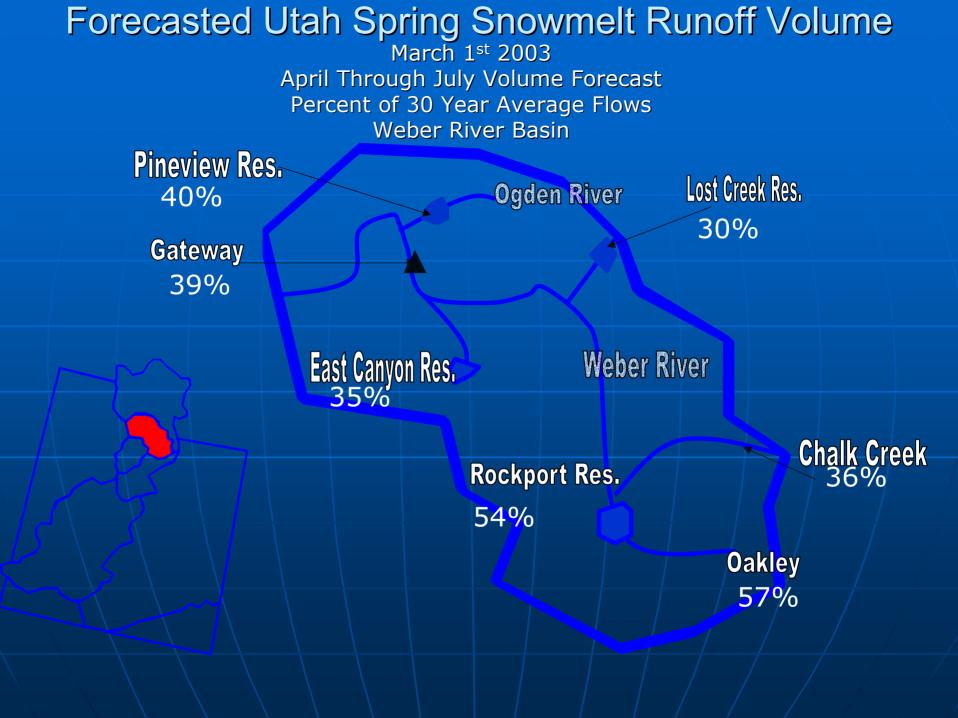


# Virgin River Basin Snow





#### Forecasted Utah Spring Snowmelt Runoff Volume March 1st 2003 April Through July Volume Forecast Percent of 30 Year Average Flows Bear River Basin **Bear River** Woodruff **Bear Lake** 39% Logan Hyrum 57% 54% Ut/Wy Stateline **Blacksmith Fork** 60%

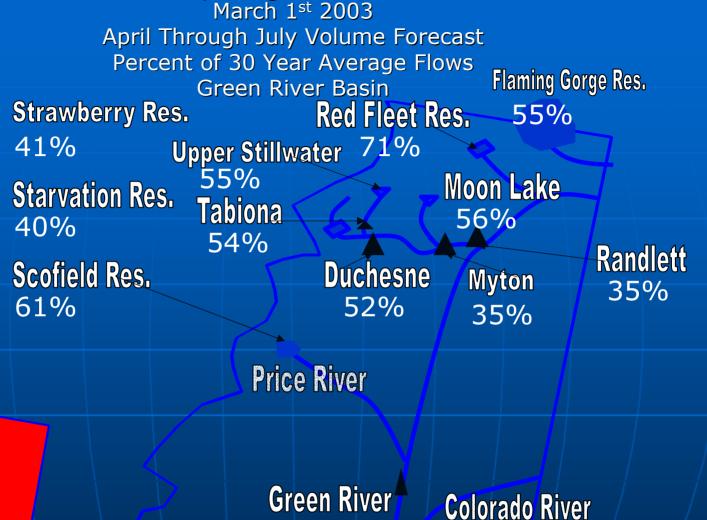


March 1<sup>st</sup> 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows

ent of 30 Year Average Flow Six Creeks River Basin



#### Forecasted Utah Spring Snowmelt Runoff Volume March 1st 2003 April Through July Volume Forecast Percent of 30 Year Average Flows Provo River Basin Jordanelle Res 45% **Deer Creek Res** 52% Woodland 51% **American Fork** 38% **Provo River** Castilla 45% **Utah Lake** 45%



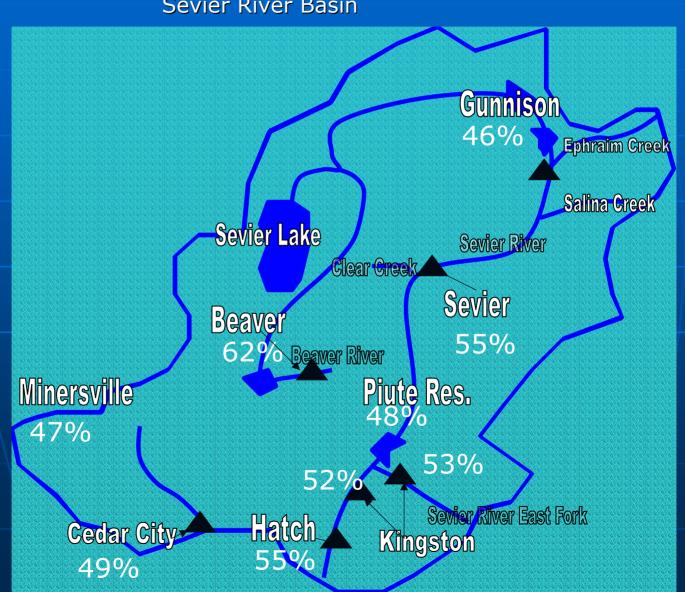
60%

Lake Powell Res.

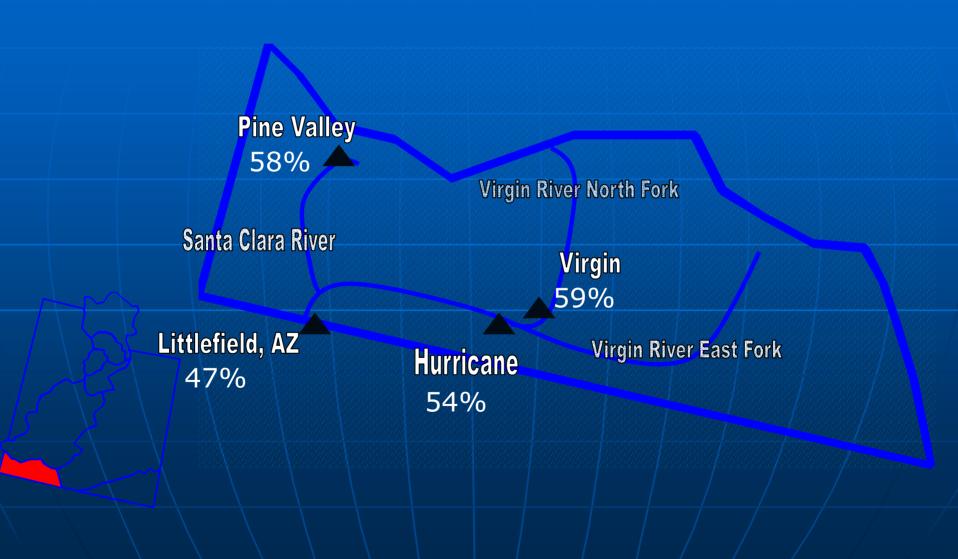
61%

March 1st 2003

April Through July Volume Forecast Percent of 30 Year Average Flows Sevier River Basin

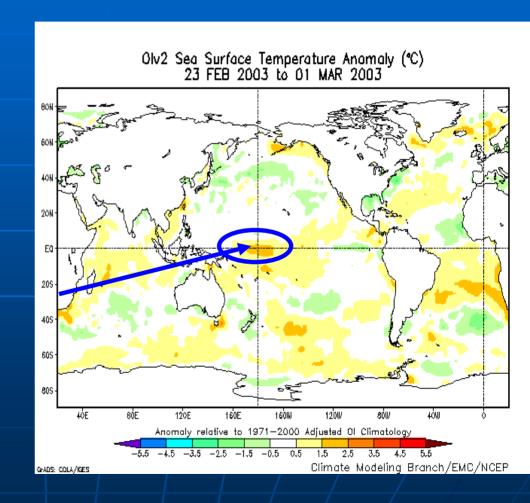


March 1st 2003
April Through July Volume Forecast
Percent of 30 Year Average Flows
Virgin River Basin



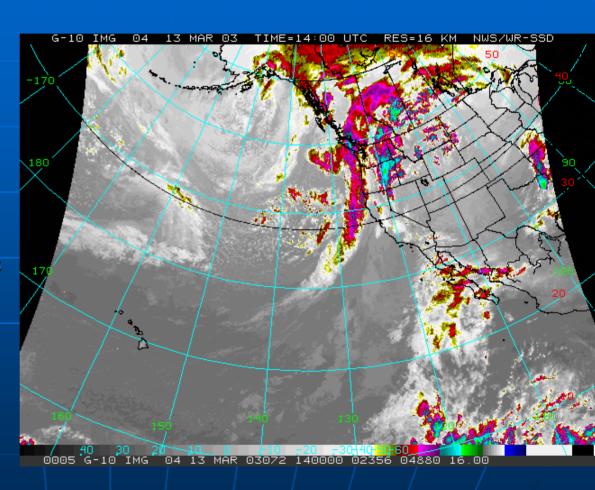
# Current El Nino Anomalies

- El Nino continues to weaken
- Expected to return to neutral conditions by this summer
- Warmer than normal area is shrinking considerably



# Short Term Weather Forecast

- Today continues record warmth
- Tomorrow cooling slightly with high clouds
- Sunday through Tuesday bringing major spring storm
- Amounts from storm may exceed 1-3 ft. statewide
- Flow from storm will progress from south to westerly
- Snow levels near 7500 ft. and lowering as storm progresses
- Currently, Anchorage is experiencing -3 f temps with winds gusting near 50 mph
- Cold air from Canada and Alaska will drop down into the pacific



#### Download This Presentation

http://www.wrh.noaa.gov/Saltlake/river/presentations/watersupply\_march03

#### Additional Information

Contact

Brian McInerney
Hydrologist
National Weather Service
801-524-4377 w
801-971-2033 c

brian.mcinerney@noaa.gov